

15
Royal College of Surgeons
THE *from the Author*
STUDY OF PHYSIC AND SURGERY;

BEING

THE INTRODUCTORY ADDRESS

TO THE

MEDICAL SOCIETY

OF

UNIVERSITY COLLEGE, LONDON.



DELIVERED OCTOBER 9TH, 1846.

BY

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FELLOW OF THE ROYAL COLLEGE OF SURGEONS;

FELLOW OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY;

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MEMBER OF THE PATHOLOGICAL SOCIETY;

FORMERLY ONE OF THE "STUDENTS IN HUMAN AND COMPARATIVE ANATOMY"


OF THE ROYAL COLLEGE OF SURGEONS;

PRESIDENT OF THE SOCIETY..

LONDON:

G. NEAL, FLEET LANE, FARRINGDON STREET.

1846.



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TO

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CONSULTING SURGEON TO UNIVERSITY COLLEGE HOSPITAL;

MEMBER OF THE COUNCIL AND COURT OF EXAMINERS,

LATE PRESIDENT, OF THE ROYAL COLLEGE OF SURGEONS;

AUTHOR OF THE DICTIONARY OF PRACTICAL SURGERY,

ETC. ETC.

THIS INTRODUCTORY ADDRESS

IS DEDICATED

AS AN HUMBLE TRIBUTE OF PROFOUND RESPECT AND REGARD,

BY HIS FORMER PUPIL,

THE AUTHOR.

INTRODUCTORY ADDRESS.

GENTLEMEN,

At the commencement of each winter session, it has been a custom for one of your Presidents to make a few general remarks, before entering upon the proper business of our assembling as Members of the University College Medical Society. The Medical Society was formed very shortly after the opening of this great academical Institution, in the year 1828, for the purpose of "promoting medical knowledge, through the discussion of observations and opinions, which may be advanced in addresses to be delivered, or essays to be read before the Society by its members;" and it at that time, as it has ever since, numbered in its ranks such of the Students of the College as were distinguished among their fellows for the zealous pursuit of scientific and professional knowledge: for amongst those who have taken their part in its advancement, are Physicians, Surgeons, general and special Practitioners, now pursuing their profession, acquiring honour and respect for themselves, while they, in their turn, are conferring

benefits on others. Some are holding high public positions, not in our own only, but in other metropolitan and provincial schools of Medicine and Surgery, both as officers and teachers. Some are Authors of works on almost all the several branches of medical science ; some, from their love of particular branches of science, have been chosen as naturalists to expeditions of discovery ; others, again, are now, in their turn, inculcating in distant climes the doctrines received within these walls ; now has been realised the hope expressed by a former Speaker of the House of Commons,* “that the day is not far distant when some of those who have been educated at this College, will, by their future labor and exertions, attain to that eminence and distinction in their professions, that shall add every year to the fame and reputation of this College, and reflect lustre on those from whom they have received their instruction ; and I hope that such fame and reputation will not be limited to this country alone, but will extend throughout those distant regions in which either English power prevails, or English language, English law, and English freedom are established.”

All Gentlemen attending or having attended any of the medical classes of the College, are eligible to be balloted for as Members ; but its useful-

* The Right Hon. James Abercrombie.

ness is not restricted to Members of this School only, for by a small increase in the entrance fee, those who have been educated elsewhere are likewise eligible. The Society consists of ordinary, extraordinary, and honorary Members; the honorary class consisting of those individuals to whom the Society desires to testify its obligation or respect. The total number of Members at the present time, exclusive of the Professors, who, as such, are Honorary Members, is about 270. The advantages possessed by the Members are, the meeting once a week for the purpose of hearing and discussing Essays, Cases, and Clinical Reports; the meetings on alternate weeks being occupied in hearing and discussing reports of cases, usually those treated in University College Hospital, and consequently under the observation of the majority of the Members. Six Gentlemen are appointed by the Society to report such cases as they may think fit, occurring in the practice of each of the Physicians and Surgeons; an arrangement which cannot be otherwise than serviceable both to the Gentlemen reporting and to the Society at large: for the reporter thus acquires the power not only of observing with correctness the signs and symptoms under which the patient labours, and of accurately distinguishing the effects of remedies employed, and of discriminating these from the effects of the disease itself,—but also of recording the previous history, present state, treatment, pro-

gress of the disease, the effects of remedial means, and, should the disease prove fatal, the pathological alterations displayed by examination of the body after death, in such a manner as to bring before the imagination of the hearer or reader all the important points of the case ; so that if the hearer or reader be well educated, and has had the faculties of his mind properly trained, he can picture to himself the case ;—and thus a report of this character becomes a most excellent substitute, where the Practitioner has not the opportunity of watching the case for himself. But a reported case is useful only when thus clearly and systematically propounded, with all its important features concisely and consecutively set forth, alike unencumbered with useless and unimportant details, and yet containing information on all the collateral circumstances which can tend to elucidate the production or the treatment of the disease. It was with the view of encouraging Students to rightly observe, and to pay more than the usual cursory attention to cases occurring in the wards of the Hospital, that the Rev. Dr. Fellowes founded the Fellowes' Clinical Prizes, in order (to quote his own words) “ to excite a more vigilant attention in the Students of the Hospital to the cases before them ; and thus to assist, in however small a degree, in increasing the number of acute, discriminating, and enlightened Medical Practitioners.”

A good system of recording cases, like all other desirable attainments, can be acquired only by care, attention, and practice, it is necessary first to learn *how* to observe, and *what* to observe. The friendly criticism to which the Authors of reports will be subjected at the Society's meetings will be sure to prove of great service both to themselves and to those who undertake the less difficult task of critics. To conclude, I would add, that if I wanted a proof of a man's competence to undertake the duties of his profession, I would ask him to present some reports of cases taken by himself; and that I hope some other Benefactor will be found to do for Surgery what Dr. Fellowes has already done for Physic, by imitating his benevolent work in founding some prizes of a similar character, for the encouragement of those who intend to devote their attention more particularly to such diseases as custom and convenience have assigned to the care of the Surgeon.

The Society has likewise the advantage of an Osteological Collection—of an extensive Herbarium in progress of arrangement, and of a well-selected Library, a large proportion of the funds at our disposal being expended in the purchase of books; an important feature of the Library is, that the books are intended not only for reference within the College, but are allowed to circulate among the Members.

A Catalogue was printed in 1843, including

such works as were then in the possession of the Society, but the numbers are now much increased. For some of our books we are indebted to the kindness and generosity of members, and other well-wishers of the Society. I would more especially mention as donors to the Library, the names of Messrs. Samuel Cooper, G. V. Ellis, Graham, Morton, Quain, and Potter, and of Drs. Carswell, Elliotson, Grant, Sharpey, Taylor, and Williams. We have also to remember with gratitude the memory of one of our former Members, who, after having pursued his studies at this College, obtaining the esteem and regard of those who had the pleasure of his acquaintance, was carried off by death, soon after he had commenced the active duties of his profession, and bequeathed to the Society a considerable number of his medical books, I mean Mr. George Anson Clowes, of Caistor, Norfolk. My own contributions at various times, however small, were intended as a proof of the importance which I attached to this branch of the Society, and of my sincere wishes for its continuing and increasing prosperity.

Man is not a being of mere intelligence, he alone, of all the works of Creative Power, is destined to reach a still higher degree of perfection; he has his chief characteristic, responsibility; he has within him the germ of spiritual life; and his course through this world, elevated as it is far above that of all other created beings,

is to him merely preparatory and initiatory to another state of existence, in which, if he has rightly gone through his probation here, the powers of his mind shall be enlarged, all his good affections purified and exalted ;—those hidden things which were objects of faith here, shall be made manifest hereafter, and he shall be happy through all eternity, in the enjoyment of everlasting felicity. Yet notwithstanding all his superiority, all his perfection, man in common with other organized bodies, has within him the principles of decay, he is subjected to numerous diseases which serve to keep him in mind of his transitory state.

Gentlemen, you will now, perhaps, allow me to occupy your attention for a short time, whilst I make a few observations on Medical Science, its relations to other branches of knowledge, and on Medical Education and Practice. I will not now say anything concerning the antiquity of the Healing Art, though on this score it might well demand respect. The true value of all human exertions, whether of mind or body, should be judged of by their utility, and in this respect the healing art will assuredly yield to no other pursuit save that of Religion alone, in the amount of usefulness with which its practice in the proper spirit of universal goodwill is attended. It has for its object the restoration, under Divine Providence, of our fellow-creatures suffering from disease, to the enjoyment of the greatest of all earthly bless-

ings—health ; to restore the child to the parent, the wife to the husband, the father to his family ; to restore what accident has impaired, and what disease has contaminated ; or, when this is impossible, where the disease is of such a nature, or of such severity, that the means which have been placed at our disposal are inadequate to this end, to mitigate their sufferings, and to render as easy as possible their passage from this to a far happier state of existence ; by soothing the pains of the body, and thus calming the commotions of the mind, to support the mental energies, and so enable him to have regard to the temporal affairs of his relatives, and to his own eternal destiny ; and here I may remark, in passing, that it is our duty to continue our attendance on such cases, although we may be sure that they must have a fatal termination, not only with this view, but also in as far as in us lies, to prevent the sufferer from falling into the power of unprincipled and uneducated men. No less than this, Gentlemen, is the object of our profession.

Again, if the practice of the Healing Art be viewed as an intellectual pursuit, it will give place to no other, for what other requires the concentration of such a variety of the several branches of knowledge, calling into exercise some of the highest endowments of the human mind, for there is scarcely any branch of knowledge which the studies, required for its successful and scientific

practice, do not more or less include ; the members of our profession are the acknowledged supporters and improvers of many of the most delightful departments of natural knowledge.

To mention some of the most absolutely essential, let us begin with Anatomy, the only foundation on which Physic and Surgery, whether viewed as a Science or an Art, or more properly as both combined, can be reared. Now this, in its liberal acceptation, presents a most extensive field of inquiry.

Anatomy, signifying the art of separating by dissection in order to investigate the structure of organized bodies, comprehends that of plants and animals. The anatomy of plants, or Phytotomy, is usually considered under the head of Botany. The anatomy of animals is subdivided into that of the lower animals, Zootomy, or Comparative Anatomy ; and that of man, Human Anatomy, or Anthropotomy : this, again, is subdivided into Relative and Surgical Anatomy, which teaches the natural relations of the several portions of the body ; and General Anatomy, sometimes named Histology, or the history of the developement, the nutrition, the chemical constitution, the physical and vital properties, and the reproduction of the tissues or textures of which the body is composed ; and lastly, Developemental Anatomy, or that science which traces the organs and tissues of the body through their successive phases of develop-

ment from their first appearance to their perfect condition.

Comparative Anatomy, itself consisting of Zoology and Zootomy, is that study which has for its object the investigation of the varied forms and conditions presented by the several organs of the body in the various classes of animal life, from the simplest to the most complicated condition, and the comparison of them with similar organs in the human body ; in this study is most fully displayed the infinite Design and Wisdom of the Almighty Artificer, in the multitude of proofs of the adaptation of the structure to the special wants and characteristic peculiarities of each individual species of animal.

The division denominated descriptive is absolutely necessary both to the Physician and Surgeon, in order to enable him to ascertain the seat of disease ; to the Surgeon, more especially, it is the light which guides him in the diagnosis of the several accidents and displacements to which our bodies are obnoxious. In the case of dislocations for instance, how many such accidents have been left undetected, and consequently unreduced, from the Practitioner's being unacquainted with the anatomy of the articulations. In the treatment of disease again, this branch of Anatomy is essential, for how can we perform an operation for aneurysm, hernia, stone in the bladder, or the removal of tumors in certain situations, as in the neck, axilla,

or popliteal space, where death surrounds the knife on all sides, without possessing a thorough knowledge of relative Anatomy? Any man who ventures to undertake a surgical operation without being thoroughly conversant with anatomy, wantonly endangers the life of the person placing reliance on such inadequate powers of aid.

“We see,” says John Bell,* “untaught men operating upon their fellow-creatures, in cases of life and death, in aneurysm, lithotomy, hernia, trepan, without the slightest knowledge of the anatomy of the parts, much less any right ideas of their conditions, and new relations to each other in the state of disease. But such operators are seen agitated, miserable, trembling, hesitating in the midst of difficulties, turning round to their friends for that support which should come from within, feeling in the wound for things they do not understand, holding consultations amid the cries of the patient, or even retiring to consult about his case, while he lies bleeding, in great pain and awful expectation ; and thus, while they are making ungenerous efforts to acquire a false reputation, they are incurring reproaches which attend them through life.”

What Anatomy, on the one hand has unfolded to us, has been the structure of the animal body in a state of rest, in the dead subject.

* “Principles of Surgery.”

Physiology, on the other, teaches us to contemplate and search into the same structures in a different condition, in a state of action, in the living body. In the study of Physiology we are permitted to unravel the sublime mysteries of the works of the Omnipotent Creator to a certain extent, beyond which no effort of man's genius or industry can carry him. Man, endowed as he is with mental faculties so far above those of all other animals, is soon met in his enquiries into the laws which regulate nature's course with the fiat, "thus far shalt thou go, and no further;" for instance, we find that voluntary movements are effected by an effort of the will, we have the inclination, and the effect follows; we can go further we find by accidents, by experiments, by disease; that the material through which this power is exercised is the brain, but in what manner, we are totally at a loss to understand; and how can it be otherwise? How can man, with his present finite capacities, compass the workings of Infinite Wisdom? What enquiry then can be more sublime, more edifying, or more worthy of cultivation, than that which teaches us how we live, and move, and have our being? But, independently of its own intrinsic worth, it is essential to the right understanding of disease; for without Physiology there can be no Pathology; if we know not the functions of a part in health, how can we know them in disease? It is clear, if we would comprehend

disease, we must first understand health, the doctrine of the regular performance of the several functions, the assemblage of which constitutes life. Vegetables and animals have their periods of origin, growth, maturity, and decay ; they spring up, they flourish, they die ; and to unveil the nature of the operations by which all this is effected is the business of Physiology.

Physiology is founded on Anatomy, both human and comparative, which points out the structure of the parts, the duties of which we are about to investigate. Comparative Anatomy, especially, offers material aid, and is essential to the progress of Physiology, not only in as far as it traces the different organs through their several modifications, from the most simple to the most complex forms, and thus arrives at the determination of the essential portion of such organ, and what portions are additional and subsidiary ; but, by studying the animal as a whole, its habits and sphere of existence, by investigating what is termed the correlation of parts—that is, what particular parts are always found associated with others—their function can be ascertained.

In the study of Physiology we must call to our aid the science of Chemistry, still further to elucidate the nature of those beautiful processes by which the nutrient material, which we receive from without, is rendered fit for sustaining and increasing the body, a subject which has received

great light from modern physiological Chemistry ; to explain the nature of the changes produced by the intimate relation which we observe in the lungs between the blood and the external atmosphere, and such like instances. Although this beautiful and interesting science, which consists in the enquiry into the molecular composition and properties of bodies, and the laws which regulate their combinations, (in contradistinction to their physical condition and constitution included in other sciences,) is generally considered as peculiarly appertaining to the curriculum of medical education ; and although it truly is essential to the Practitioners of Medicine, it is no less true that it should form a part of the education of every man who pretends to lay claim to the character of a Gentleman ; it should form a part and an integral part of general education, for how can a man understand the nature of the various processes employed in the arts and manufactures every where going on around him, which have contributed not a little to raise this great country to the position it occupies in the scale of nations, without a knowledge of Chemistry ? Its beautiful facts possess as much interest for the general as for the medical scholar.

By the study of Physiology and its auxiliary sciences we become acquainted with the healthy and normal structure, properties, and functions of the animal body, or the phænomena of health.

But as Practitioners of the healing art, our occupation specially concerns the altered or abnormal structure, properties, and functions of the organs of the body, both individually and as a whole, comprehended under the title of Pathology, the science by which we become acquainted with the phænomena of disease. Pathology includes a knowledge of the numerous causes which tend to the production of disease—Etiology; the symptoms by which it is manifested—Semeiology; the discrimination of the particular form it assumes—Diagnosis; the power of stating beforehand what changes will occur, and the various complications and modifications it will undergo in its progress, and what its termination will be—Prognosis; and, lastly, a knowledge of the changes produced in the different organs as a consequence of the disease; or of the changes in the organs and tissues leading to the derangement of function, whether of relative position, colour, consistence, cohesion, weight, size, form, intimate structure, atrophy, hypertrophy, or the deposition of new heterologous formations—Pathological Anatomy.

The study of the intimate nature of disease, although the most abstruse, is the most valuable portion of Pathology; and, indeed, without a knowledge of this absorbing study, our treatment is blindly empirical, for treatment should be directed to the removal of the producing cause of the disorder, not to the produced effects; for instance,

take the symptom cough, from how many different causes may this arise, or the symptom headache, and the treatment of these two symptoms must, in different cases, be exactly at variance, according to the cause giving rise to the cough or the headache.

Pathological or morbid Anatomy, bearing the same relation to Pathology that Healthy Anatomy does to Physiology, should be pursued with the constant object of discovering what alterations of structure are associated with certain symptoms observable during the life of the patient and the progress of the disease, not as a mere branch of natural history whereby it loses its vital importance and interest, and becomes, to all intents and purposes, a barren study. I may remark in passing that the students of this College, in which are assembled the largest medical classes in London, have great inducement to devote attention to the study of Morbid Anatomy, in consequence of its possessing means for the illustration of this important and difficult branch of Pathology, in the shape of exquisite drawings and models superior to those possessed by any other medical school in the metropolis.

Pathology, then, as we have seen, takes cognizance of the phænomena presented by disease.

Therapeutics enables us practically to apply the knowledge thus obtained to its mitigation or removal, it is in fact the art of healing, or the application of the principles taught by the science

of Pathology. Therapeutics may be divided into two branches :—

I. Therapeutics proper, The treatment of disease, or the means of *restoring* the body to a state of health.

II. Hygeine, The prevention of disease, or the means of *sustaining* the body in a state of health.

As an essential branch of Therapeutics, we must reckon *Materia Medica*, as it is termed, having for its object an acquaintance with the derivation, appearance, and properties of the substances employed in the treatment of disease. As the numerous articles made use of at the present day are derived from all three kingdoms of nature, the mineral, the vegetable, and the animal ; it is obviously necessary to have some general acquaintance with each of these branches of knowledge, Mineralogy, Botany, and Natural History, in its restricted sense as applied to the animal kingdom alone. As these substances are not employed in their original state, but are variously combined and changed, of some only particular portions, the active principles, being used ; Chemistry and Pharmacy are necessary in studying *Materia Medica*.

Materia Medica includes, in addition, a knowledge of the effects of all these agents on the living body in its various conditions of health and disease ; the best form for their exhibition, direc-

tions for the choice, and rules for the administration of the remedial means suitable for the case of disease under consideration ; an acquaintance likewise with the peculiar temperaments, diatheses, or idiosyncracies met with in different individuals, and in what manner, and to what extent, such variations from general constitution modify the action of remedies.

Hygeine involves the important subject of the preservation of health, and includes, therefore, a knowledge of the various articles yielding and used as food, with their effects, the effects of climate, and other external agencies, upon the animal body, including rules for diet and general regimen ; a subject springing directly from Physiology, and consisting of rules founded on its general laws.

And now, Gentlemen, seeing that these several sciences lend their aid in supporting the superstructure of Physic and Surgery, what progress can be made in them without a *liberal education*, without a knowledge of the Latin and Greek languages, used by the learned in all ages and in all countries ? How can we have recourse to the stores of ancient learning preserved for our use, or even many of the scientific works of the present day, composed in these, so far falsely, denominated dead languages of Greece and Rome, without possessing a competent knowledge of classics ? Some of the most valuable years of his life, when the faculties of his mind are in the state best fitted for the

acquisition of knowledge, is the Student of Medicine compelled to spend—to waste, I say, this his most precious time, in the degrading servitude of an apprenticeship, not only is his time for ever lost and opportunities neglected, but how much does this injurious system tend to lower those who are about to enter our profession in the eyes of the public? A portion, at all events, of the five years now devoted, and in too many instances only wasted in apprenticeship, might be both profitably and pleasantly occupied in the general improvement of the mind, in the study of Mathematics, the Latin, Greek, French, and German languages, Natural Philosophy, Chemistry, Botany, and Natural History, at such an institution as that in which we are now assembled, where there is every facility, every accommodation for such desirable occupation. “It is well known,” says a learned Professor, “to every one conversant with medical education, that to instruct in any branch of medicine a person whose previous education is defective, and whose mind has been unaccustomed to application or labour up to the time at which professional studies ought to begin, is a most difficult task,”* he must have attained a certain amount of knowledge before he can be competent to receive more. Without this preliminary education how can a man understand even the terms made use of in

* Professor Quain’s “Observations on the Education and Examinations for Degrees in Medicine,” &c., 1845.

scientific discourses, though the simplest possible phraseology be employed? If, then, he cannot understand the import of the terms in which they are expressed, how can he rightly estimate the value of the ideas submitted to him? How can he understand the various mechanical actions going on in the body, without some knowledge of that portion of Natural Philosophy denominated Mechanics; the physiology of the eye, without some acquaintance with Optics; of the ear, with Acoustics; of the lungs, with Pneumatics; of the circulation, with Hydraulics and Hydrostatics? If he has not gradually disciplined his mind to study, how can he expect to be enabled at once to fix his attention on philosophic inquiries demanding continued and elaborated mental exertion? How can he expect to feel delight in the study of difficult and abstruse subjects, when he has hitherto felt not the pleasure of study at all? How can he apply himself to observation, when he has not habituated himself to acquiring the power of application, without possessing a habit of thought? for the mind requires culture and exercise as much as the body. If there were no other inducement to acquire a liberal education, there would be this, that as the public are no judges of our peculiar professional acquirements, they judge of us as they would of members of the two other learned professions, or indeed, of any other class, by our general erudition, and according to our excellence they hold us

in respect and esteem, as enlightened members of society.

Such individuals as have not had the advantage of a good preparatory education, should even now dedicate some portion of their time to its acquirement ; they cannot, it is true, afford now to bestow much time, being so fully occupied with their purely professional avocations ; and this circumstance, indeed, is a convincing proof (if such were wanting) that this preliminary education should be completed before the commencement of the more strictly professional studies.

Now, in stating that this vast array of different sciences may be advantageously studied by the members of the Medical Profession, I wish not to be misunderstood, as saying that a thorough knowledge of all is essential either to fit us for entering or for efficiently pursuing it. To say this, would be the perfection of absurdity ; it would be requiring that which no mortal ever yet attained, or ever will attain ; it would be laying claim to that which every one knows we do not and cannot possess ; for the pretension of which, therefore, we should be deservedly exposed to the ridicule and contempt of the public. What I mean is, that without possessing a *due amount* of knowledge on these several subjects, without an acquaintance with the elementary principles and general leading doctrines of these sciences bearing on the grand focus of Physic and Surgery, the Practitioner can-

not practise his profession with pleasure to himself ; all would be dull, tedious, and uninviting ; he would act merely empirically, and be ignorant of the grounds of his practice ; he would not feel the delight which its scientific pursuit is capable of affording ; he would not be looked up to with respect, nor would his society be courted by the great, the intellectual, and the good “ *Altius ibunt, qui ad summa nituntur.*”

In order to ensure a competent acquaintance with the several branches of medical education, the Student should be examined at frequent intervals, at the close perhaps of each session, on the several subjects of the classes he may have been attending ; this plan would not only have the effect of ensuring a competent acquaintance with these subjects, but it would be advantageous to the Student in another respect ; for, after the conclusion of these progressive examinations, he would not be compelled to retain in recollection such a vast assemblage of arguments, proofs, and objections as, under the present system, bewilder his attention ; for although it is quite necessary to retain in recollection the great truths relating to Physic and Surgery, he may, after having once known and become familiarised with the details on which such great doctrines rest, safely allow them to become effaced from his memory.

Again, a man may be satisfactorily acquainted with the subjects I have been enumerating, with

Anatomy, Physiology, Pathology, Therapeutics, and the other handmaids of Medicine ; he may have diligently attended the lectures on Midwifery, Physic, and Surgery ; he may have “ become a walking cyclopædia ;” but he must not stop here, he should recollect that lecturers can teach him only the general principles of his profession ; in every special case which comes under his notice, he will find himself thrown on his own resources ; he will find himself much perplexed on entering into practice, when he feels the responsibility which he has incurred in having the lives of his patients committed to his care, more especially of such individuals as from their circumstances and his position are entirely under his charge, not having either the knowledge requisite to discern his possession, or want of capacity, or the means to enable them to procure other aid ; all the sciences we have been enumerating are only so many aids to enable him to undertake the *treatment* of disease. This cannot be learnt in the closet from books, nor in the schools from lectures alone ; lectures and books cannot teach the healing art, they can only remove difficulties, and smooth the road for its acquirement by personal observation and labour. Each individual must learn for himself ; he who expects to be taught, or, in other words, that he can sit at his ease and receive knowledge through the exertion of another man’s brain will find himself entirely disappointed. The attend-

ance on lectures, and the reading of books, will not alone store your minds with that knowledge which you desire to possess ; they are useful only as guides to show you the road, to point out the most ready means of acquiring the knowledge you are in pursuit of, and to afford you the results obtained by the labours of others ; for the labours of a single mind, although to each individual the most valuable of all, are but small and insufficient, without that of others, his predecessors and contemporaries.

How true is the remark of Sir Benjamin Brodie, that three-fourths of a man's knowledge dies with him.

The Student must closely examine disease for himself at the fountain-head,—in the wards of the Hospital. In order to assist the memory, we have recourse to the expedient of figuring in our imagination, picturing to ourselves, the particular incident or assemblage of facts which we may wish to retain in recollection ; and by this means a vivid impression is made on the mind, which it is difficult to efface : so in the actual observation of disease, the reality is presented, which in the former case was only an artificial and imaginary picture, how much more effectual still must be our acquaintance with a subject derived in so impressive a manner ? The enquirer should think what plan of treatment he would himself have adopted in each particular case he observes. This

will enable him, in the first place, to ascertain in what respects his proposed treatment might have been either altogether erroneous, or inefficient, with the reasons why it would have been so ; and when more advanced by a longer course of observation, he will see in what respects the treatment which was pursued might have been deficient, and to make up his mind how he ought to conduct a similar case when it shall occur in his own practice. He should remember that the end of all his studies is to enable him to treat disease ; “ a mere philosopher makes but a poor adviser in the hours of sickness ;” and that man will be the most successful in practice, who has stored his memory with well-arranged precedents, in which true experience consists, not in mere age, or the total number of cases he may have seen, but in the careful observation and deliberation on facts, which may serve as guides, either as beacons to be avoided, or examples to be followed : so that a careful systematic observer may acquire more practical experience in five years, than a careless superficial spectator will in the whole course of his life.

Let me, Gentlemen, having only a few years gone through the ordeal myself, earnestly entreat those who are now commencing their studies not to waste their time upon hurtful or frivolous pursuits ; they may believe me, they will find the period allotted to their studies, although it may

appear a long time to look forward to, quickly pass.

On entering into practice, how often do the best-educated amongst us feel some uncertainty, some anxiety whether or no the best treatment has been adopted for our patient ! whether the existing state of knowledge could not have enabled us to do more for his advantage ! What, then, must be the feelings of him who has not used all the means of improvement within his reach, but has wasted his time in frivolity and dissipation !

When once engaged in the pursuit of your profession, do not waver or wish to change ; if you do not like it for its own sake, and for the sake of the good it will enable you to bestow on your fellow-creatures, independently of the hope of its being the means of enabling you to live, you are not fit for it, are not worthy of it, and will never eventually benefit either yourselves or others.

In the words of the excellent advice given by Sir James Graham, after one of the annual meetings in this College, “To all I would urge an earnest entreaty to be diligent, to turn aside from the primrose path of pleasure, and to pursue that road of honest industry which, though at first perhaps less inviting, in the end surely leads to happiness and renown. Recollect that youth is the season for acquiring knowledge, it is the seed time of life ; opportunities then neglected never again return ; and the regret of

time misspent is always bitter, but never half so unavailing and painful, as when, amidst the cares and business of active life, the conscious want of a fund of knowledge is accompanied by the impossibility of then acquiring it, and by the remembrance of useful studies abandoned for vain gratifications and unsubstantial enjoyments."

Let me urge you on to untiring industry in the pursuit of our noble vocation ; the labour of acquiring knowledge is more than compensated by the delights which spring from its possession ; unlike the votaries of pleasure, we have not to travel to the right or to the left for the means of its gratification ; our daily occupations bring with them their sure reward ; unlike his pleasures, ours increase by exercise ; the more knowledge we obtain, the happier are we. But, further, we have been endowed with talents, some to a greater, some a lesser extent, but on all have talents been bountifully bestowed ; these it is our bounden duty to employ for the benefit of others to the utmost of our power, a duty from which we cannot shrink without subsequent penalty and remorse. Consider what is the responsibility when the balance of life and death is poised, and the destinies of the sick, and perhaps of his relatives (as far, at least, as this world is concerned), rest solely on the skill of his medical adviser ! Remember, Gentlemen, this responsibility will be yours ! We have, therefore, as motives for exertion and industry in our useful

profession, the prospect of gaining an honourable means of subsistence, and of living in a respected position in society, the enjoyment of intellectual pleasure in its study, satisfaction and delight in its practice, the consciousness of being useful to our fellow-creatures, and in thus doing our duty ; can more be said to excite you to labour, and to cultivate the talents entrusted to your care ? Let your whole conduct and character be such as shall reflect credit on this College, as by that means, and by that means alone, can its claim to intrinsic worth and public esteem be maintained. Let it be your wish to continue to uphold the good opinion formed of your predecessors, as expressed in the Report to the Council, in the second year of our academical age, and which I may safely say continues undiminished to the present time : “ On the whole it may be said with perfect truth, that the industry, the zeal for science, and the general good conduct of the Medical Students of the University, have been such as to procure for them, collectively, that character which the Professors most desire that they should possess ; a character which cannot fail to become attached to the school itself, and which will be the more gratifying to all connected with it, because won by no injudicious indulgences, but by severe and continued application to whatever may be found valuable to the Student when he has taken a final leave of his preceptors.” Let us not idly spend our time in looking after the

failures of other schools, but honestly give them their full meed of praise, whenever it becomes their due ; let us advance, not by depreciating others, but in endeavouring to excel them ; above all, let each individual here think that the honor of this Institution in some degree depends upon himself : and if this principle be acted on, some amongst great numbers will always rise to eminence and exalted position in society. The honors to be obtained in our profession are freely open to all, confined to no station ; wealth and influence cannot command them, but industry, honesty, labor, and truth, are sure to meet their reward ; real lasting celebrity is to be attained only by real merit and fitness for the duties we undertake. Let us never lose sight of the brilliant example John Hunter has left us, but endeavour to be as industrious as he was. Look at that splendid monument of his genius and industry, the most complete series of examples of physiological science existing in the world, which he left for the benefit of mankind, which is now the ornament and pride of the College of Surgeons, the admiration of foreigners, and an honor to the country. The invaluable contents of which Museum are now rendered universally available by an elaborate descriptive catalogue, and which, through the fostering care of that College, is being continually further enriched, so as more and more to realize the expanded ideas, the far-seeing objects, the vast design and aim of its great Founder,

viz. the illustration of the phænomena of life both in the healthy and diseased conditions throughout organized nature. Look again at the mass of surgical knowledge which has been accumulated by living industry in this splendid volume,* the labor of a beloved Professor in this College; a book which has found its way into all the civilized countries of the world, and, like the productions of Hunter, will be referred to as authority so long as Surgery itself shall be respected and cultivated; a work which will remain a lasting memorial of knowledge and industry; and the name of whose author will be esteemed and admired as a Benefactor to his race, so long as intrinsic worth and public character shall hold their sway in the affections of men.

In offering you a few remarks, Gentlemen, on Medical Practice, I may say, at the outset, that the Medical Profession has reached, in this country, a degree of perfection, which, as a whole, is not only unsurpassed, but unequalled in any other. There do not appear so many “stars” in the profession now as in former days, but the truth is, that knowledge and skill are not now, as formerly, confined to a small number of individuals, who were therefore men of renown by comparison, but are now widely diffused; the large body of Practitioners now possess an amount of knowledge equal to that possessed by the rare exceptions of bygone days.

* Cooper’s Surgical Dictionary.

The Medical Profession, as at present constituted, consists of different classes,—Physicians, Surgeons, General, and Special Practitioners, of these by far the most numerous, and those to whose lot the treatment of the great mass of disease falls, are the General Practitioners ; but, in London and other large cities, some individuals, feeling a deeper delight in the prosecution of some particular branch, pursue that department of practice more especially, and, in consequence of their being thus freed from the harassing labor of a constant and unremitting occupation in the actual practice of their calling, possess greater opportunities for the acquirement of more minute and intimate acquaintance with the practice and literature of their favorite study. Hence these become the Teachers and Authors in the several branches of the healing art, and to whom those, the occupation of whose time has precluded such lengthened observation, may have recourse in cases of difficulty from unusual severity or uncommon occurrence ; how important then is it for the furtherance of our art that these individuals should be fostered and upheld ! such of them I mean as by their industrious application and originality of mind perform their part in enlarging the boundaries of Medical and Surgical knowledge. On the other hand, seeing how large a share of responsibility devolves on the General Practitioner, can it be doubted that his education should be substantial and practical ! not only to

enable him conscientiously to fulfil the arduous duties he undertakes, but also to maintain the position in society, to which, as a Gentleman, as a man of science, as a man of honor and integrity, as a man who is constantly, as far as in him lies, benefitting his fellow-man, he is justly entitled. The education, in fact, of all who enter the Medical Profession should be the same ; all who intend to practise any special department, should be competent to practise the whole, and then, if they choose to restrict themselves to any particular branch they can do so with the greatest efficiency ; and indeed, under these circumstances, their thus restricting their practice will enable them to enlarge the boundaries of our art. The Physician should not be distinguished for his total ignorance of Surgery, nor the Surgeon for his ignorance of Physic, but the Physician for his superior knowledge of Physic, and the Surgeon for superior knowledge and skill in Surgical science and art. As in all others so in our Profession, there are some who, although regularly admitted into its ranks, not only disgrace themselves by advertizing, puffing, and employing secret remedies, but bring discredit on the Vocation itself, by making that which ought to be a Profession, in the strictest sense of the term, of the most liberal and scientific character, a mere medical trade. As far as is possible, the compounding, and certainly the retailing, of drugs, should be separated from the

duty of the General Practitioner. Again, unfortunately for this country, quackery never was more rife than at the present moment ; the laws jealously defend a man's property ! but they do not defend what is much more valuable, his health ! witness the large incomes which are acquired by ignorant, though impudent and barefaced impostors, who, by their unblushing promises of cure, deceive the unwary and uninformed ; and these men are encouraged and patronized not only by the poor and unlearned who know no better, and who should, therefore, be protected by a wise and paternal government ; but by those from whom we might expect better things ; is it not deplorable in this country, to see advertised, day after day, year after year, in the newspapers, some nostrum for all diseases, whose fancied virtues are attested by the ignorant portion of our, as a body, enlightened and judicious aristocracy ! In my own opinion, notwithstanding all that has been said about the inexpediency and impossibility of suppressing illegal practice, it should be summarily put down by the strong arm of the law : and no measure of Medical Reform, so much talked about now-a-days, can be perfect without such provision ; nay, I think this the first professional monster that should be attacked, and to this I esteem the consideration of the minor differences between the several classes of the Profession itself as but a very insignificant and secondary object. Medical men,

as a body, should unite to put down this great evil ; they should not let the assertion that they are interested in the matter influence their conduct ; it is a subject in which they should feel interested for the benefit of their fellow-creatures. If the most enlightened men, men who possess all the knowledge which is available, men of experience and practice, cannot combat all diseases, how can the public be so short sighted, with regard to the profession of medicine alone, as to persuade themselves, or rather to be, with their eyes open, talked into the belief, that an ignorant, unenlightened charlatan, can, by his ignorance and presumption, accomplish more good ?

The study of Medicine should have the effect, just as is so commonly and so justly said of Astronomy, of confirming our faith in the irresistible power and surpassing goodness of God ; and, as would be expected, amongst the votaries of our art, have been found in every age, men alike distinguished for their learning, their humanity, their charity, and their piety.

In the language of the present Lord Chief Justice of the Queen's Bench, Lord Denman, the members of the Medical Profession possess " not only the severer but also the softer and more liberal virtues." They should be endowed with presence of mind, power to act with decision and promptitude, for on this the life of the patient oftentimes depends, with readiness of resource, dexterity,

gentleness, firmness, kindness ; and it should also be remembered, that success in the Medical Profession depends greatly on the peculiar qualities of each individual's mind, on his sagacity in fact, and the power of making himself agreeable to his patients, as well as on the possession of his due share of professional knowledge ; in order to ensure lasting celebrity, unimpeachable moral character must be added to knowledge and skill : these alone may acquire a transitory fame, their owners may be consulted from necessity, but they will not be held in regard, and acquire lasting celebrity without possessing the requisite additional adornments of character. By the members of our profession, all ranks of life should be treated with the same kindness, attention, and care, as they are all subject to the same trials from the attacks of disease, or, I ought rather to say, if they make any difference, more kind, more considerate, to those who are not only sick, but suffering from the twofold calamity of sickness and poverty, by which they are precluded from the possibility of obtaining those luxuries which may serve to render the bed of sickness less irksome, less distressing. Above all things act honorably with your professional brethren ; how many opportunities have we, on the one hand, by agreeing with, and perhaps increasing, by word or deed, or even by our silence, the ill estimation in which a patient may undeservedly hold a professional brother ; of

ruining that man's reputation, or, on the other hand, by explaining the difficulties and uncertainties under which a man previously consulted may have laboured, reinstate him completely in estimation and good-will : and how different are these two acts !—one destroying a man's fair character behind his back, for some sordid motive ; and the other merely doing our duty in fulfilling the injunction, “ Do unto others as ye would they should do unto you.” But, in addition to their professional capacity, the members of the Medical Profession are unreservedly admitted into families, and become not only friends and companions on account of their general and scientific information, but are frequently admitted into still closer intimacy, and become the advisers under circumstances of trial and difficulty : to them family occurrences are confided, which would not be disclosed to any other, so that often not the health only, but the happiness and even the reputation of a family, are entrusted to his keeping ! How essential, then, is it for the members of the Medical Profession to be distinguished for honorable uprightness and moral integrity !

Although in the case of the Surgeon, he has frequently not the power to confer permanent benefit on his patient, without still further temporarily increasing his sufferings ; yet the Surgeon has, under these circumstances, the pleasure which the Surgeon alone can feel, that he has been the

means, in the hands of Providence, of benefiting his fellow-man by means of the practice of that art, from which, and from which alone, such benefit could have been derived. "The sterling usefulness of Surgery," says an admired author, "its plain truths and obvious facts; its conspicuous efficiency; its freedom from mystery and deception; are recognised by all capacities and all conditions. Hence, those who truly excel in it, and combine with such proficiency, prudence and integrity, are sure to find patrons in every country and in every clime."* It is not enough for the surgical Student to know the mode in which operations should be performed, or even to be able to execute them with celerity, skill, and safety to his patient; it is, at all events, equally important to know when they are called for, and when they are likely to prove of service to the sufferer: and this part of the study is that on which most students are found to bestow the least attention. They are too prone to run after the greater surgical operations and rare medical cases; but these are to nine-tenths of us, mere matters of curiosity. The great part of our practice will consist of such cases as may be seen among the out-patients of an hospital, and to these we should consider it our duty to attend. A Surgeon must, if he wishes to practise his department of the profession with

* Professor S. Cooper's Introductory Address to the Students of University College, 1844.

credit to himself and advantage to his patients, in addition to Surgery in its restricted sense, be thoroughly conversant with practical Physic ; he must not be content with having attained the amount of knowledge on this branch of medicine usual with students on leaving the schools ; but his study of it must, if he wishes to be held in respect as a Surgeon, be continued *pari passu* with his surgical studies, and with the improvements which are continually being effected in the sister art. How absurd would it be for a Surgeon not to understand the treatment of secondary fever, for instance, or for him not to know that symptoms resembling those of strangulated hernia may be present, without the hernial contents really being strangulated, or even without the presence of a hernial tumor at all ! What disease or injury coming under the charge of the Surgeon, can be properly treated without the aid of more or less internal remedies ? Nay, the very same diseases come under the care of either the Physician or the Surgeon, according perhaps to the mode in which they may have been induced : for instance, inflammation of the brain or its membranes, if it arise after an injury to the cranium, belongs to the Surgeon ; if it be diopathic, the Physician claims the case ! And wherein does the treatment differ ? The Surgeon, therefore, must possess an amount of knowledge on the subject of Physic equal to that of the Physician, or he is unfit for the duties he undertakes.

The Healing Art is advanced by steady application and unceasing industry in the observation of nature, by the labors of such men as Harvey, Hunter, and Jenner. Facts, though at the moment they may appear isolated and unimportant, if carefully registered and accumulated, will at length grow in number and importance, so as to give rise to great, comprehensive, and important generalizations and doctrines. Like other branches of natural knowledge, Physic and Surgery must, for its advancement, be pursued in strict accordance with the Baconian method, by induction, by observation, taking nothing for granted, accepting nothing without positive proof of its truth ; great caution should be used in adopting new doctrines, there are so many sources of error, even among persons of good faith, so many circumstances may arise to give plausibility to supposed facts and theories, which, after all, may be explained on other and already known principles. In the pursuit of science it is better to err on the side of suspicion and inaptitude for instant conviction, than on that of too great credence ; better to exercise discretion in criticising the foundations and supporting arguments of new doctrines, than to give immediate adherence, even though they be promulgated by those usually regarded as authorities : in the pursuit of science authority must be but little respected. Do not allow mere speculation to assume the place of facts, mere opinion must not be

relied on ; the only way of improving the art of medicine is to take nothing for granted, and above all, to first learn and acknowledge our ignorance, then shall we feel the necessity for observation. Look at the vast amount of time, labor, and opportunities, which have been thrown away in fantastic fancies, falsely denominated theories by their unhappy authors ; do not deceive yourselves and others by flattering yourselves that you have explained the phænomena of health or disease by having put some unproved crude notions into so many words ; how satisfactorily, as they wish to believe, have many speculative imaginations ascertained the manner in which the various articles of the *Materia Medica* exert their influence on the animal body, yet of how few do we really know the method of action ! Again, how prone people are, after having administered some supposed remedy, to ascribe the recovery of the patient, should that have been the fortunate result, to the beneficial agency of the material exhibited ; but, in order to draw such conclusions with safety, the records of many similar cases are required, together with parallel cases in which similar treatment has not been adopted ; call to mind the long catalogue of drugs which have been at one time vaunted into ephemeral fame, and then in turn abandoned. **Facts** must be first observed, then after a time a certain degree of generalization may be attained, and so progressing from smaller to greater gene-

ralizations, we may hope at length to arrive at the knowledge of the grand, comprehensive, general laws, both of disease and its treatment, for doubtless they are fixed and sure. I do not, of course, mean to condemn Theories properly so called, established on the substantial basis of numerously observed and well established facts, logically deduced from observations and experiments ; these should not be made to conform to preconceived notions, we must be more humble, not making ourselves the judges of what the laws by which the operations of nature are conducted should be, but be content to follow the only true and safe inductive method, by which we shall be enabled to discover in what those laws consist.

Physic and Surgery are divided into two parts, the science and the art, frequently called the principles and the practice ; the science being the knowledge of the laws regulating the production and course of disease ; the art being the application of those laws to practical purposes. In proportion as the science has been advanced, so has the art become more and more extended and profitable. On the foundation of science alone, can the practice of the healing art be advantageously reared : so soon as this foundation shall be removed, our art will dwindle and fail ; so soon as Physic and Surgery shall cease to be pursued as a science, so soon will its real worth and public estimation be annihilated. It has been said that a knowledge of the

cause, progress, and termination of disease, is useless without the knowledge of a means of cure. But this is far from being the case, before we can hope to discover a means of cure, ^{*}we must become acquainted with the nature of disease; before we can hope to be able to prevent its occurrence, we must know on what causes its production depends. To conclude, Gentlemen, "While ye have time, do good unto all men;" and may your career be one of heartfelt gratification to yourselves, and of extensive usefulness to others.

FINIS.